

INTELLIGENCE

## ASSISTANT SECRETARY OF DEFENSE 6000 DEFENSE PENTAGON WASHINGTON, DC 20301-6000

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April 29, 1997

MEMORANDUM FOR SECRETARIES OF THE MILITARY DEPARTMENTS
CHAIRMAN OF THE JOINT CHIEFS OF STAFF
UNDER SECRETARIES OF DEFENSE
DIRECTOR, DEFENSE RESEARCH AND ENGINEERING
ASSISTANT SECRETARIES OF DEFENSE
INSPECTOR GENERAL OF THE DEPARTMENT OF DEFENSE
ASSISTANTS TO THE SECRETARY OF DEFENSE
DIRECTOR, ADMINISTRATION AND MANAGEMENT
DIRECTORS OF THE DEFENSE AGENCIES

SUBJECT: Use of the Ada Programming Language

Last year, I asked the National Academy of Sciences'
National Research Council Computer Science and Telecommunications
Board to study the Department of Defense (DoD) software policies.
After carefully reviewing and considering the Board's final
report, I have directed my staff to undertake the necessary
actions to revise the policy contained in DoD Directive 3405.1,
"Computer Programming Language Policy," to eliminate the
mandatory requirement for use of the Ada programming language in
favor of an engineering approach to selection of the language to
be used. Additionally, DoD 5000.2-R, "Mandatory Procedures for
Major Defense Acquisition Programs (MDAPs) and Major Automated
Information System (MAIS) Acquisition Programs," will be revised
consistent with those changes.

DIRECTORS OF THE DOD FIELD ACTIVITIES

In the interim, pending formal coordination of the necessary revisions, programming language selections should be made in the context of the system and software engineering factors that influence overall life-cycle costs, risks, and potential for interoperability. As appropriate, these selections may be reviewed during milestone/system approval processes. Among the factors that should be considered and appropriately documented in the decision process are:

 system/software requirements, including performance, interoperability, reliability, safety, and security requirements;



- system/software architecture, including partitioning into components;
- extent of compliance with/incorporation of other related direction (e.g., use of standards such as the Joint Technical Architecture, open systems, and commercial-offthe-shelf software) and the impact thereof;
- selection of software development and support methodologies and processes;
- use of software development and support tools and generators;
- long-term maintenance implications, including evolvability and supportability; and
- integration of software issues and decisions with other planning considerations to include cost, schedule, acquisition strategy and staffing.

Ada should be one of the languages considered in this decision process; however. Ada waiver requests are no longer required when another language is selected.

My point of contact for this action is Ms. Linda Brown, who is assigned to my Deputy Assistant Secretary of Defense for Command, Control and Communications, (703) 604-1590, e-mail: Linda.Brown@osd.pentagon.mil, or Mr. Samuel Worthington, (703) 604-1584.

Emmett Paige, Jr.